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ABSTRACT

The growth of telecommunications technology for distance learning in the Cyberspace Age has opened many options for studying off-campus from home or office from remote and sparsely populated communities. Higher education is exploring this modern version of correspondence courses with the goal of increasing their student enrollment as well as making their degree programs more readily available. An integral component to the success of these programs is the extent and strength of the library support that can be offered to this new generation of distant learners. This paper addresses the distance education roles of library services, librarians, and faculty; examines some recent success stories in digitizing libraries; and explores several options in developing electronic library support for distance learning, including teaching and providing online searching and tutorials, CD ROM databases, Internet, Netscape, and World Wide Web access. (Contains 13 references.) (Author/SWC)

DISTANCE LEARNING AND LIBRARIES IN THE CYBERSPACE AGE

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ABSTRACT

The growth of telecommunications technology for distance learning in the Cyberspace Age has opened many options for studying off-campus from home or office from remote and sparsely populated communities. Higher education is exploring this modern version of correspondence courses with the goal of increasing their student enrollment as well as making their degree programs more readily available. An integral component to the success of these programs is the extent and strength of the library support that can be offered to this new generation of distant learners. This presentation will examine some recent library success stories in "digitizing" libraries and explore several options in developing electronic library support for distance learning. The future of distance learning is tied to the future of higher education.

INTRODUCTION

Distance learning (DL) can be defined in the most general terms, as a method of education that involves an instructor and student(s), who are separated geographically and must rely on one or more methods of long-distance communication. It is the direct descendent of correspondence and home study courses, that were developed in the 19th century and relied on the post office to keep the instructor and student(s) in contact. American correspondence study flourished from 1873-1897 under the guidance of one of its leaders, Anna Eliot Ticknor, the "mother of American correspondence study," who founded the Boston-based Society to Encourage Study at Home (Holmberg, 1986). Ticknor also originated the exchange of comments as well as grades with students. In fact, distance learning can be traced to 1728, when the Boston Gazette advertised shorthand lessons by mail (Verduin and Clark, 1991). Distance learning then is certainly nothing new. What is new, however, is the wealth of telecommunications options available today that enable the provision of this high-tech educational environment. The information technology available today permits a variety of delivery options (Bates, 1995): one-way technologies, such as print, audio and video cassettes, instructional television (pre-recorded and broadcast), radio, and computer-based (multimedia) learning; two-way technologies, such as audio (telephone only) conferencing, teleconferencing (television and telephone) and computer conferencing (group "chat" on e-mail). This information technology will be used increasingly to provide quality instruction to ever-growing numbers of students. This includes not only the original target group of geographically-isolated students, who are indeed distanced from campuses, but local working adults as well, who can not attend on-campus courses because of family and professional obligations.

The Commission on Colleges of the Southern Association of Colleges and Schools (SACS) offers this detailed definition of DL (Mizell, 1994):

> Distance learning is that educational process that occurs by delivering instruction designed to accommodate students who are physically remote from the main campus or from a location of campus or program origin. In this process, the requirements for a course or program may be completed through face-to-face interactions and/or through remote communications with instructional and support staff including either one-way or two-way written, electronic, or other media forms.

THE ROLE OF LIBRARY SERVICES

Primarily, library services on campus support the curriculum with a basic level of service, which organizes materials and provides reference assistance. Within the distance learning environment, off-campus (or extended campus) library services can be defined (Hammer, 1994) as:

> Those services offered in support of academic courses and programs offered away from the main campus of the institution responsible for the academic program. These courses may be taught in traditional or non-traditional ways. This definition also includes services to individuals who are involved off-campus regardless of where credit is given. This definition does not include non-traditional students pursuing on-campus academic programs.

Library services off-campus should be very similar to on-campus services. In fact, on-site and remote-site library use is a consideration for the on-campus student population since so many of them now work from home or office. Library services should include full inter-library loan service, reference services, document delivery services, and electronic database services. Additional services should also be provided for these students, such as an 800 number for call-in reference service and special document delivery from the library in the form of full fax and mail service of most library materials. However, the relationship of time and money as well as use policy considerations will ultimately either facilitate or restrict the progress of off-campus library services. A few years ago, in a study on distance education programs in Canada, Alexander Slade observed that while politicians and educators have both heralded distance learning as a means of increasing accessibility and reducing educational costs, they have been generally silent on the issue of off-campus library services (Slade, 1991). The situation remains much the same today.

ROLE OF LIBRARIANS

Library services for off-campus students bring with them a new role for librarians. A role that insures that off-campus students are in no way at a disadvantage compared to their on-campus counterparts (Latham, 1991). Librarians need to expand their traditional roles and work more closely with off-campus instructors and students to provide materials and reference as well as instructional services. Methods for providing bibliographic instruction to obtain access from remote locations must be developed. Special guides and supplemental materials must be prepared by librarians and must be also made accessible electronically from remote locations. Special document delivery methods must be arranged for distance learners. All these services should be provided by a specifically-assigned support staff and a designated librarian. Otherwise, these services fall on a library reference staff already dealing with both a campus and a community population. Librarians should embrace these new opportunities to redefine their roles and take a proactive stance, as eagerly as they welcomed and grasped the technological innovations that so rapidly changed their libraries (Latham, 1991).

ROLE OF FACULTY

Faculty need to recognize students' library needs. Before the advent of information technology, library skills were something you learned just once. The high-tech environment of libraries now necessitates that students and faculty periodically re-learn library skills within this new environment. Tony Bates, an authority in information technology and educational media and a founder of the UK's Open University, states that faculty need to know not only how to choose and use the appropriate technology, but also how their students will learn and use it. Bates also remarks that the lack of appropriate training is the biggest barrier to the use of technology in education (Bates, 1995). Faculty must take this into account when they send their students to prepare library assignments. Students should expect that library instruction will be available to them off-campus as well as on campus to support them in the preparation of their library assignments.

Faculty also need to interact with librarians to insure that the library can support their students' classwork. That is, faculty should collaborate with librarians at the curriculum level. The class librarian can suggest materials that could be used to support the instruction and facilitate library assignments. One example serves to illustrate the importance of this point. NMSU has run a graduate distance education site in the summer at San Juan College in Farmington, NM for a number of years. As recently as last summer, they did not have internet access and the local library can not meet all the needs of these graduate students. Students come from as far as six-hours away; and the nearest adequate library is a more than a four-hour drive away. In this instance, library access drives instructional strategies. Hard copy materials must be brought to the site and/or student activities are redesigned.

TWO SUCCESS STORIES

The Oryx Guide to Distance Learning: a Comprehensive Listing of Electronic and Other Media-Assisted Courses (Burgess, 1994) includes information from 298 fully-accredited post-secondary institutions from 44 states, which offer more than 1,500 media-assisted courses for which full academic credit can be earned. (Interestingly enough the six states not included are Delaware, Hawaii, Mississippi, New Mexico, Montana and Vermont.) These institutions are accredited by one of the following eight agencies: American Association of Bible Colleges (AABC), Distance Education and Training Council [formerly National Home Study Council] (DETC), Middle States Association (MSA), North Central Association of Colleges and Schools (NCA), New England Association of Schools and Colleges (NEASC), Northwest Association of Schools and Colleges (NASC), Southern Association of Colleges and Schools (SACS), and Western Association of Schools and Colleges (WASC).

Obviously, distance learning is booming. Library services to support these classes are another matter as has been mentioned. Each accreditation agency has its own guidelines for distance learning and its academic support, including library services. It is interesting to note that the North Central Association of Colleges and Schools (NCA), the accreditation agency for the State of New Mexico, does not mention off-campus services for libraries, but puts them in one of the four accreditation criteria, which covers library services (Hammer, 1994): "an accredited institution has effectively organized adequate human, financial and

physical resources into educational and other programs to accomplish it purposes."

Some institutions, however, have emerged as good examples of providing innovative and substantial distance learning and academic support for their students. Two will be discussed, one in Florida and another in Alaska. Considered among the institutional leaders in distance learning is Nova Southeastern University (NSU, formerly Nova University) in Florida (Mizell, 1994). They offer both undergraduate and graduate programs. Almost half of their 12,000 students are enrolled in distance education classes. NSU uses the following online tools and resources: 1) audiobridges (toll-free telephone connections for two-way discussion); 2) videotapes; 3) audiotapes; 4) telephones; 50 electronic mail; 6) the electronic classroom (virtual classroom through split-screen technology); and 7) the electronic library (catalog and delivery service). Of these, number six, the electronic classroom, merits additional explanation. Using the UNIX system, an electronic forum is created in which the student and instructor may interact simultaneously. This is called the "talk" or "chat" mode on electronic mail. The screen is divided in two. Instead of a 50/50 split of the screen, the screen is divided in a 33/66 split. The top one-third is used to register the names of the students, who have logged in, and is also reserved for the remarks of students, who are "called on" by the instructor. The lower two-thirds is reserved for the course instructor to display previously prepared material or to enter questions or comments during the class--in real time. By far the most popular method is what NSU calls its cluster-based programs located in sites around the country, which hold once-a-month classes plus the use of some of the previously mentioned online tools and resources. NSU operates distance education programs for non-resident students in 30 states (Mizell, 1994).

Another institutional leader in distance learning is the University of Alaska, Fairbanks (UAF). Because of the numerous rural degree programs in their state, UAF recognized early the need for information resources to support them (West, 1992). For many of the students enrolled in Alaska's distance delivery programs, mostly through audioconferencing, it may be their first contact with higher education--making it all that more important. To serve undergraduates, graduates and non-degree students as well as this new population of their academic community, The Elmer E. Rasmuson Library at UAF replaced their traditional library services with a distance delivery program of their own, primarily through the use of electronic technology. Sharon West explains how they did it (West, 1992). They established an Extended Campus Services (ECS) unit with full document delivery and information brokering. They established both a reference question mailbox on the University of Alaska Computer Network as well as another mailbox for interlibrary (ILL) requests. The latter were processed within 48 hours, and packets were either mailed out or faxed to the patrons (scanning and sending electronically proved too time-consuming). They established a special phone line (voice-mail did not work) from 8:00 AM to 5:00 PM and trained staff, that assisted librarians, to conduct reference interviews on the phone. Telephone call backs were also used to request more information and improved overall patron satisfaction. They embarked on a publicity campaign to advertise these special services. Library faculty members began teaching a distance education course on information-seeking skills and going out to the branch campuses once a year for consultation. The only drawback seemed to be that these new services were developed without additional funding and were initially seen as special services for off-campus students at the expense of the on-

campus ones. Librarians also conducted research for the off-campus students, which again was seen as going beyond traditional library practice. The on-campus political environment, then, must also be factored into the planning of these extended services (West, 1992).

CONCLUSIONS

Librarians must develop and fund expanded services to meet the demand created by the new distance learning in the Cyberspace Age. Librarians must teach distance learners the Internet, Netscape, World Wide Web and access to a variety of CD-ROM databases. They must also prepare "how to" research guides and make them available electronically. Distance learners should also take a special computer applications course as soon as possible in their distance education program. Course work in information technology should also be expanded. Some other areas for development include: on-line tutorials, such as a library instruction homepage; Online Catalog Library Center (OCLC)'s First Search experimentation; and demonstrations and instructions on how to telnet to the library using a variety of access paths, including those available from commercial services. Faculty should work with librarians to anticipate distance learners' needs and develop strategies to meet them.

Only once the primary library concerns of staffing and funding can be settled, can library services begin to exploit the technology available today to better serve their on- and off-campus students. Distance learning using information technology grows continuously in the Cyberspace Age. As more students attempt to accommodate their studies around busy family and professional lives, it promises to become increasingly important in providing an alternative to traditional on-campus education. Only by planning to meeting these challenges of this new environment, will libraries be able to serve the higher education community of the 21st Century.

References

Bates, A. W. (1995). Technology, open learning and distance education. New York: Routledge.

Berry, J. (1993). Recruiting faculty, distance education, and a new optimism. Library Journal, 118, 37.

Burgess, W. E. (1994). The Oryx guide to distance learning: a comprehensive listing of electronic and other media-assisted courses. Phoenix, AZ: Oryx Press.

Hammer, K. G. (1994). Off-campus library services and the impact of NCA accreditation. Master's research paper, Kent State, Kent, Ohio. (ERIC Document Reproduction Service No. ED 367 849)

Holmberg, B. (1986). Growth and structure of distance education. Wolfeboro, NH: Croom Helm.

Latham, S., Slade, A. L., & Budnick, C. (1991). Library services for off-campus and distance education: an annotated bibliography. Ottawa, Ontario: Canadian Library Association.

Mizell, A. P. (1994). Graduate education through telecommunications: the computer and you. Paper presented at the annual meeting of the Association for Educational Communications and Technology, Nashville, TN. (ERIC Document Reproduction Service No. ED 368 346).

Morrison, R., & Ellsworth, J. H. (1994). College & Research Libraries News, 5, 256-258.

Perration, H. (Ed.). (1993). Distance education for teacher training. New York: Routledge.

Slade, A. L. (1991). Library support for off-campus and distance education programs in Canada: an overview. Library Trends, 39, 454-478.

Texas Higher Education Coordinating Board. (1995). Instructional telecommunications in Texas higher education: a progress report to the 74th legislature in response to SCR 66 of the 73 legislature. Austin, TX: Texas Higher Education Coordinating Board.

Verduin, J. R., Jr., & Clark, T. A. (1991). Distance education: the foundations of effective practice. San Francisco, CA: Jossey-Bass.

West, S. M. (1992). Information delivery strategies and the rural student. College & Research Libraries, 53, 551-561.

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